

WHAT IS CLAIMED IS:

1 1. A multilayer film structure comprising a polymer substrate, the polymer substrate comprising:

- 5 (a) a core layer comprising a film-forming polyolefin, the core layer having a first side and a second side; and
- (b) a skin layer on the first side of the core layer, wherein the skin layer comprises a film-forming ethylene acid terpolymer resin composition comprising (i) polyethylene, (ii) acrylic acid, methacrylic acid, 10 or mixtures thereof, and (iii) alkyl acrylate, alkyl methacrylate, or mixtures thereof.

2. The multilayer film structure of claim 1, wherein the polymer substrate is produced by a process comprising the following steps (1) and 15 (2):

- (1) coextruding the core layer and the skin layer; and
- (2) orienting the coextruded core layer and skin layer.

3. The multilayer film structure of claim 2, wherein the orientation in 20 step (2) is biaxial orientation.

4. The multilayer film structure of claim 1, wherein the polymer substrate is produced by a process comprising:

- (1) extruding and orienting the core layer in a machine direction; 25 and
- (2) extruding the skin layer onto the first side of the machine direction-oriented core layer and then orienting the skin layer and the machine direction-oriented core layer in a transverse direction.

5. The multilayer film structure of claim 1, wherein the polyolefin of the core layer is isotactic polypropylene.

5 6. The multilayer film structure of claim 1, wherein the polyolefin of the core layer is high density polyethylene.

7. The multilayer film structure of claim 1, wherein the ethylene acid terpolymer contains a total of from about 0.5 wt% to about 6 wt% of acrylic acid, methacrylic acid, or mixtures thereof, based on the total weight of the ethylene acid terpolymer.

8. The multilayer film structure of claim 1, wherein the ethylene acid terpolymer contains a total of from about 6 wt% to about 20 wt% of alkyl acrylate, alkyl methacrylate, or mixtures thereof, based on the total weight of the ethylene acid terpolymer.

9. The multilayer film structure of claim 1, wherein the skin layer (b) is a first skin layer and the core layer (a) has a second skin layer (c) on the second side of the core layer, and further wherein the polymer substrate comprises the core layer (a), the first skin layer (b), and the second skin layer (c).

10. The multilayer film structure of claim 9, wherein the second skin layer (c) is selected from the group consisting of ethylene homopolymers, propylene homopolymers, ethylene-propylene copolymers, propylene-butene-1 copolymers, ethylene-propylene-butene-1 terpolymers, and blends thereof.

11. The multilayer film structure of claim 1, wherein the skin layer (b) is surface-treated by flame treatment, corona discharge treatment, or plasma treatment.

the film structure
layer (b) of the
surface of the

Arnold

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